

REMARKS

The above amendments and following remarks are submitted in response to the Official Action of the Examiner mailed June 10, 2004 (i.e., Paper No. 4). Having addressed all objections and grounds of rejection, claims 1-20 as amended, along with newly presented claims 21-25, being all the pending claims, are now deemed in condition for allowance. Entry of these amendments and reconsideration to that end is respectfully requested.

The specification has been amended above to supply information regarding the serial numbers and filing dates of cross-referenced applications.

Claims 1-19 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,898,456, issued to Wahl (hereinafter referred to as "Wahl"). This ground of rejection is respectfully traversed as to the amended claims for the following reasons.

The architecture of Applicants' invention as disclosed and claimed is substantially different from the architecture described by Wahl. In Applicants' system, a user makes a video-on-demand request to a master controller (i.e., "multi-media application server"), which in turn spools the requested program into temporary memory and assigns one of a "plurality of video servers" to for "streaming" to the user. The "multi-media application server" improves overall efficiency of the system

through the manner in which it handles the user request, prepares (i.e., "spools") the request program for delivery, and selects one of a number of video servers for streaming the program to the user. The many advantages of this architecture are described in Applicants' specification. For example, the process of recording and billing are much enhanced by routing all user requests directly to the centralized "multi-media application server". Similarly, such central control promotes efficiency of operation, adds convenient modularity for system expansion, and lowers overall cost.

In the Wahl approach, the user makes his request of a "zone II local subordinate server" which honors the request, if it can. The "zone I central server" is only notified if the "zone II local subordinate server" cannot honor the request. This decentralization of control greatly increases the system overhead at each element of the network. Wahl does not appear to address billing, for example, or the greater costs of modularity or the complexity of control communication for his decentralized system. Nevertheless, these are the implications of the Wahl approach.

Because the Examiner apparently had some difficulty in appreciating the architectural differences, slight amendments have been made to claims 1, 6, 11, and 16, being all originally presented independent claims to more explicitly highlight Applicants' architecture.

Specifically, with regard to claim 1, the Examiner in making his rejection finds that Wahl's "local server SL1" is both one of the claimed "plurality of video servers" and the claimed "multimedia application server". To assist the Examiner, claim 1 has been amended to require that the "multimedia application server" receives the user request, spools the selected program, and assigns the video server to perform the streaming. The selected video server only streams the requested program to the user. Wahl cannot make these limitations. Similarly, even though the Examiner has found "local server SL1" of Wahl to correspond to the multimedia application server, "local server SL1" does not make the actual selection of the server to respond to the request. "Local server SL1" either honors the request or refers the request to control facility CL1. The rejection of claim 1, as amended, and all claims depending therefrom, is respectfully traversed.

The Examiner repeats these errors in his rejection of claim 6. Again, the Examiner finds that Wahl's "local server LS1" is both one of the claimed "plurality of video servers" and also the claimed "multimedia application server". Similarly, "local server LS1" does not select which server is to honor the request as claimed. It either honors the request or notifies "control facility CL1" to select the server. The amendments to claim 6 are deemed to make these distinctions more explicit. The

rejection of claim 6, as amended, and all claims depending therefrom, is respectfully traversed.

The rejections of claim 11 and 16 repeat these errors. Nevertheless, claims 11 and 16 have been herein amended to make this distinction more explicit. The rejections of claims 11 and 16, as amended, and all claims depending therefrom, are respectfully traversed.

In rejecting claims 2, 7, 12, and 17, the Examiner states:

....Wahl discloses selecting one of the servers SL1....SLN or SM baasaed upon the that (sic) particular server having the requested movie (col. 4, lines 2-6 and 16-20).

However, the Examiner does not acknowledge that his citation shows that "control facility CL1" makes the selection. This is inconsistent with the Examiner's findings with regard to the claims from which claims 2, 7, 12, and 17 depend (i.e., claims 1, 6, 11, and 16, respectively), wherein he has found that the claimed "multimedia application server" required to make the selection has been found to correspond to "local server LS1" of Wahl. Therefore, the rejection of claims 2, 7, 12, and 17 is respectfully traversed as internally inconsistent.

Claims 3 and 8 depend from claims 1 and 6, respectively, and are further limited by assignment to the "video server" which is least utilized. This is done for load leveling purposes. Wahl discloses no suggestion of making this determination and

certainly makes no suggestion of assignment on this basis.

Furthermore, the Examiner's rejection does not assert that Wahl meets this limitation. Therefore, the rejection of claims 3 and 8 is respectfully traversed as inadequate as a matter of law.

In the rejection of claims 4, 9, 13, and 18, the Examiner repeats his error from the rejection of claims 2, 7, 12, and 17. The Examiner has found one element of Wahl (i.e., LS1) to be the claimed "multimedia application server" and has found a different element of Wahl (i.e., CL1) to perform the claimed assignment by the "multimedia application server". The rejection of claims 4, 9, 13, and 18 is respectfully traversed.

In the rejection of claims 5, 10, 14, and 19, the Examiner fails to address the limitations of the claims. The claimed invention requires the "multimedia application server" to decide when to delete a program in favor of another and to direct the selected "video server" to perform the swap. The Examiner's citation of Wahl clearly shows that the "local server" makes the swap determination. As a result, the system of Wahl is less efficient in that it may be swapping a movie out of memory which it will need again very soon. Centralized control minimizes this type of memory "thrashing". The rejection of claims 5, 10, 14, and 19 is respectfully traversed.

Claim 15, which depends from claim 11, requires that the "multimedia application server" have logic to determine when a

particular server is at capacity. In accordance with Wahl, this determination is made by the "local servers" which further promotes the inefficiency of the system architecture. The rejection of claim 15 is respectfully traversed.

Claim 20 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Wahl. Apparently, the Examiner has done so because he admits that Wahl does not meet the limitations of the claim. He states:

Wahl does not explicitly disclose inhibiting unloading movie A10 in the memory if the performance utilization of the movie A10 is greater than the performance utilization of movie B2.

However, in making his rejection in this manner, the Examiner admits that he has not made a *prima facie* case of obviousness as required by MPEP 2143. To comply with controlling law (i.e., MPEP 2143), the Examiner must show that the alleged combination has all of the claimed limitations. He has admitted that it does not. Therefore, the rejection of claim 20 is respectfully traversed for the admitted failure of the Examiner to present a *prima facie* case of obviousness.

Newly presented claims 21-25, though differing in scope (e.g., limited by a separate administrative message path) from originally presented and now amended claims 1-20, are deemed patentable for similar reasons. These newly presented claims, along with the amendments to the originally presented claims, are

deemed completely supported within Applicants' specification and drawings.

Having thus responded to each objection and ground of rejection, Applicants respectfully request entry of this amendment and allowance of claims 1-25, being the only pending claims.

Respectfully submitted,

Michael J. Rieschl et al.

By their attorney,



Date September 9, 2004

Wayne A. Sivertson
Reg. No. 25,645
Suite 401
Broadway Place East
3433 Broadway Street N.E.
Minneapolis, Minnesota
55413
(612) 331-1464